Amendments To Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-7. (Canceled)

8. (New): A block-up converter comprising:

a subharmonic mixer;

wherein said subharmonic mixer is configured to receive a first input signal, wherein said first input signal is an intermediate frequency signal;

wherein said subharmonic mixer is further configured to receive a second input signal, wherein said second input signal is a local oscillator signal in the Ku band or lower;

wherein said subharmonic mixer is configured to output a RF signal having a frequency greater than 26 GHz;

a filter configured to receive said RF signal and filter unwanted spurious signals which may be present in said RF signal; and

a power amplification device configured to receive said RF signal and to provide a desired signal gain;

wherein said subharmonic mixer, said filter, and said amplification device are located on a single multi-chip module, such that all signal interfaces with said multi-chip module occur at frequencies less than 26 GHz except for the final output of said RF signal from said multi-chip module;

wherein said multi-chip module is configured to be surface mounted using a lead frame interface;

wherein said block-up converter is configured to be a high power block-up converter, wherein high power is defined to be any power greater than 1 Watt; and

wherein said block-up converter is configured to provide a high frequency output, wherein high frequency is defined to be any frequency greater than 26 GHz.

9. (New): The block-up converter of claim 8, further comprising a wave-guide interface configured to output said RF signal from said multi-chip module.

10. (New): The block-up converter of claim 8, further comprising an insert coupled to said high power amplification device, wherein said insert comprises a material characteristic of at least one of: high thermal conductivity and low thermal expansion properties.

11. (New): The block-up converter of claim 8, further comprising a chassis and a cover, wherein said chassis and said cover are secured together to substantially encase said block-up converter.

12. (New): The block-up converter of claim 8, wherein said multi-chip module is configured to be a drop-in component within the next higher assembly level.

13. (New): A block-up converter comprising:

a subharmonic mixer;

wherein said subharmonic mixer is configured to receive a first input signal, wherein said first input signal is an intermediate frequency signal;

wherein said subharmonic mixer is further configured to receive a second input signal, wherein said second input signal is a local oscillator signal in the Ku band or lower;

wherein said subharmonic mixer is configured to output a RF signal having a frequency greater than 26 GHz;

a filter configured to receive said RF signal and filter unwanted spurious signals which may be present in said RF signal; and

a power amplification device configured to receive said RF signal and to provide a desired signal gain;

wherein said subharmonic mixer, said filter, and said amplification device are located on a single multi-chip module,

wherein said block-up converter is configured to be a high power block-up converter, wherein high power is defined to be any power greater than 1 Watt; and

wherein said block-up converter is configured to provide a high frequency output, wherein high frequency is defined to be any frequency greater than 26 GHz.

14. (New): The block-up converter of claim 13, wherein said multi-chip module is configured to be surface mounted using a lead frame interface.

15. (New): The block-up converter of claim 13, further comprising a wave-guide interface configured to output said RF signal from said multi-chip module.

16. (New): The block-up converter of claim 13, further comprising an insert coupled to said high power amplification device, wherein said insert comprises a material characteristic of at least one of: high thermal conductivity and low thermal expansion properties.

17. (New): The block-up converter of claim 13, further comprising a chassis and a cover, wherein said chassis and said cover are secured together to substantially encase said block-up converter.

18. (New): The block-up converter of claim 13, wherein said multi-chip module is configured to be a drop-in component within the next higher assembly level.

19. (New): A method for assembling a block-up converter on a single multi-chip module, the method comprising the steps of:

electrically connecting a subharmonic mixer on a multi-chip module to a filter on said multi-chip module;

wherein said subharmonic mixer is configured to receive a first input signal, wherein said first input signal is an intermediate frequency signal;

wherein said subharmonic mixer is further configured to receive a second input signal, wherein said second input signal is a local oscillator signal in the Ku band or lower;

wherein said subharmonic mixer is configured to output a RF signal having a frequency greater than 26 GHz;

wherein said filter is configured to receive said RF signal and filter

unwanted spurious signals which may be present in said RF signal; and

electrically connecting said filter to a power amplification device that is also located on said multi-chip module,

wherein said power amplification device is configured to receive said RF signal and to provide a desired signal gain;

wherein said block-up converter is configured to be a high power block-up converter, wherein high power is defined to be any power greater than 1 Watt; and

wherein said block-up converter is configured to provide a high frequency output, wherein high frequency is defined to be any frequency greater than 26 GHz.

20. (New): The method of claim 19, further comprising the step of electrically connecting said power amplification device to a wave-guide interface on said multi-chip module that is configured to output said RF signal from said multi-chip module.

21. (New): The method of claim 19, further comprising the step of surface mounting said multi-chip module using a lead frame interface to the next higher assembly level.

22. (New): The method of claim 19, further comprising the step of securing a chassis and a cover together to substantially encase said block-up converter.

23. (New): The method of claim 21, further comprising the step of electrically connecting a driver amplifier, also located on said multi-chip module, between at least one of said subharmonic mixer, said filter, and said power amplification device.